



# hmi

high-accuracy  
measurement  
instruments

FICHA TÉCNICA DE PRODUTO

PRODUCT DATASHEET

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**HMI – Automação e Instrumentação, Lda.**

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PORTUGAL

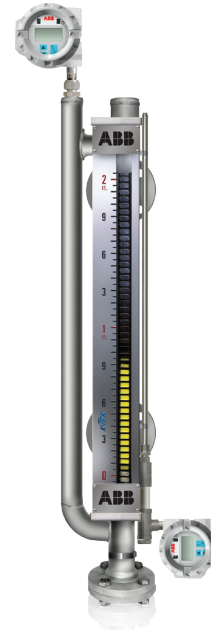
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# MW05 MagWave Magnetic Level Gauge

## Dual chamber level system K-TEK Products



### Multiple Chamber Styles

- 24 Preconfigured Styles Plus Custom Styles
- Left Hand or Right Hand Mounted Secondary Chambers
- Capped or Flanged Secondary Chamber Connections
- 2, 3, or Multiple Process Connections

### Secondary Chamber Sizes to Suit the Application

- 1-1/2 inch Schedule 10 Standard
- 2, 2-1/2, 3 and 4 inch Sizes
- Schedule 10, 40 or 80 Welded or Seamless

### Variety of Chamber Materials

- 304SS, 316SS, Hastelloy C-276, Alloy 20, Other Non-magnetic Metals
- Teflon "S" Coated Chambers for Slip Resistance.

### Chamber Configurations to Fit Process Connections

- Custom Manufactured for Every Installation
- Side - Side
- Top - Side
- Side - Bottom
- Top - Bottom

### Unlimited Range of Connection Sizes and Ratings

- 1/2 inch Threaded Half Couplings to 2-1/2 inch 1500# Flanges and Beyond
- ANSI, DIN and Other Flanges
- Matched to Customer Specified Connections
- Carbon Steel Flanges on Stainless Steel Chambers

### Highly Visible Indicators

- Fluorescent and High Temperature Shuttle Indicators
- Yellow & Black Magnetic Bargraphs
- Red & White Magnetic Bargraphs

### Made to Order Rulers

- Foot and Inch
- Running Inches
- Negative to Positive Numbering
- Meter / centimeter
- Custom Made for Percent or Volume

### Custom Built Lengths

- Connection Centers to 40 feet (12.2 meters)
- No "Off the Shelf" systems
- Full Measurement Range

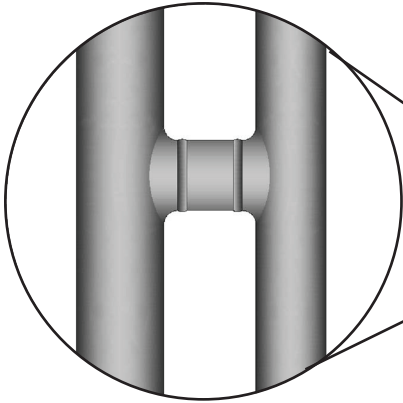
### Accessories

- Magnetically Actuated Switches
- Magnetostrictive Transmitters
- High Temperature Insulation Blankets
- Cryogenic Insulation
- Vent, Drain, and Isolation Valves
- Electric and Steam Tracing

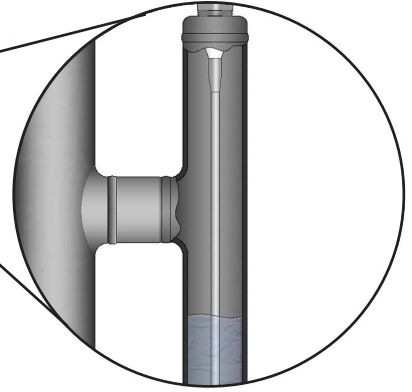
Featuring Guided Wave Radar Transmitters

### Compact Close Coupled Chambers

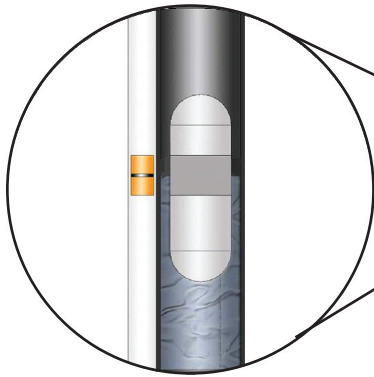
Extruded Outlet Connections



Single Probe Guided Wave Radar Transmitter

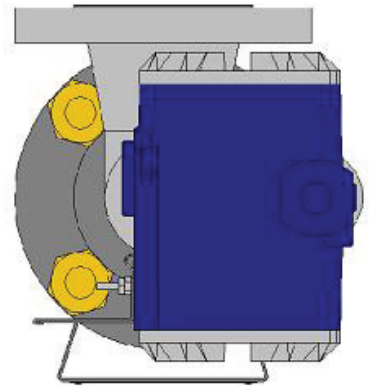


Highly Visible Magnetically Coupled Indicator

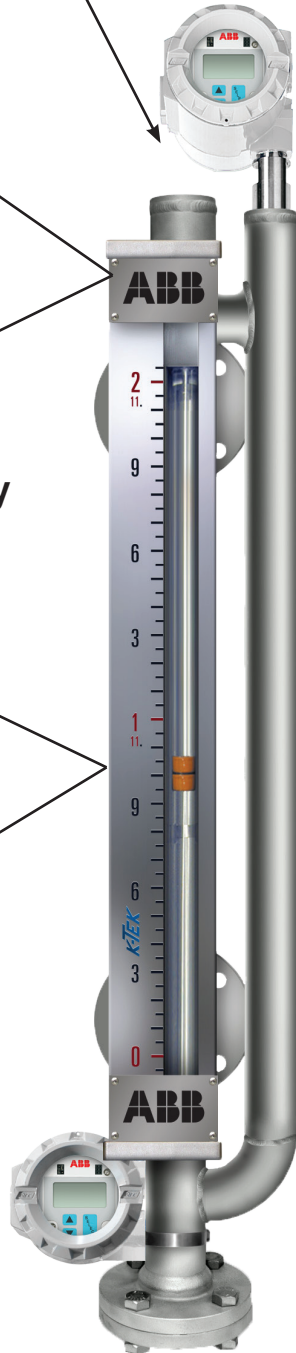


Standard 1-1/2 inch Secondary Chamber

Compact Footprint



ASME  
B31.1, B31.3



Secondary Chamber Elbow Drain Connection

Model MW0513

# MagWave

## No Need For Coaxial Probes

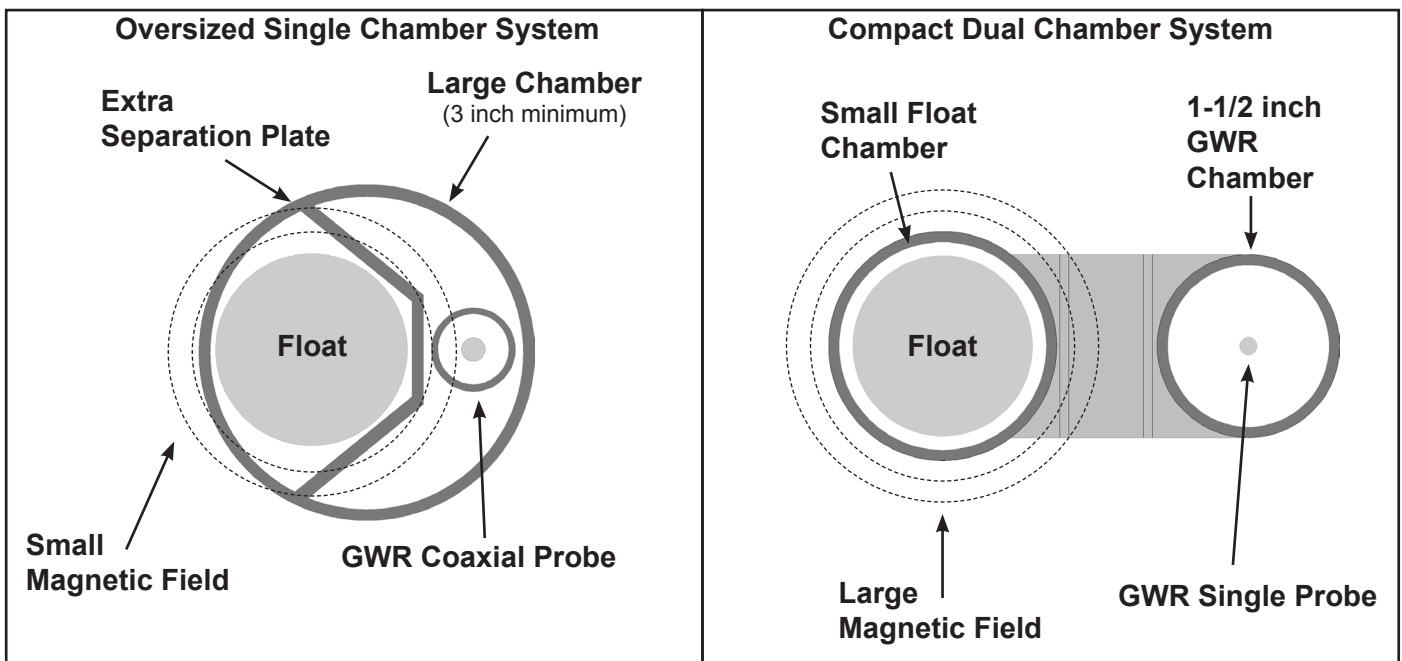
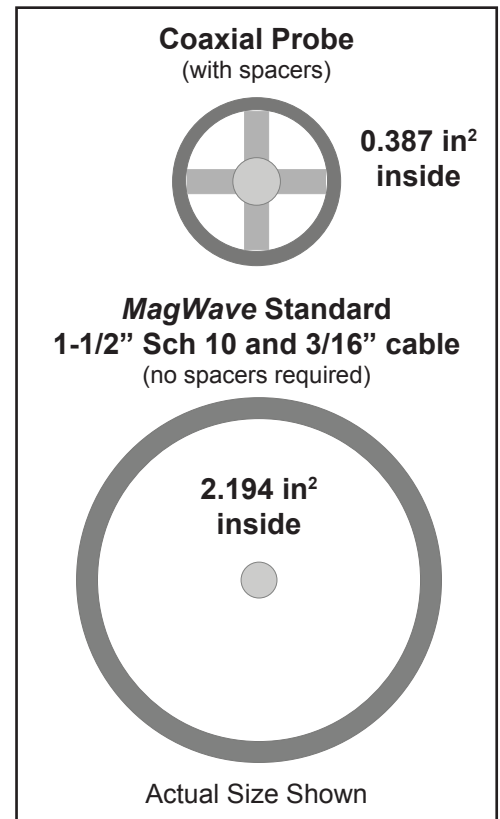
- A Single Probe in the 1-1/2 inch Secondary Chamber provides the same measurement capabilities as a coaxial probe
- The small internal space of a coaxial style probe is very susceptible to fouling in dirty fluid
- Coaxial probes have small holes that are prone to fouling causing false level readings
- If the single probe does encounter build up, it can be easily removed from the chamber for cleaning

## Why Separate Chambers?

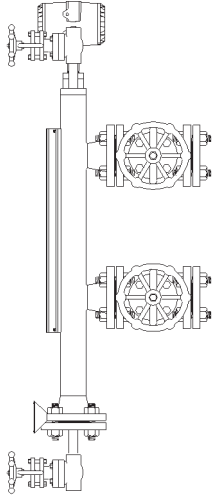
Putting a GWR and a float in a single chamber requires larger pipe sizes, larger flange sizes, and a separation plate between the float and the GWR coaxial probe.

Single Chambers result in:

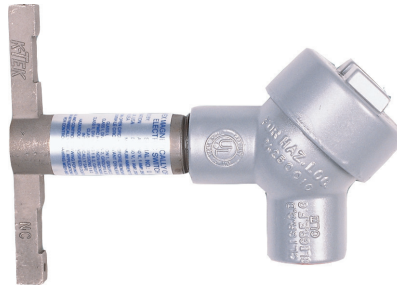
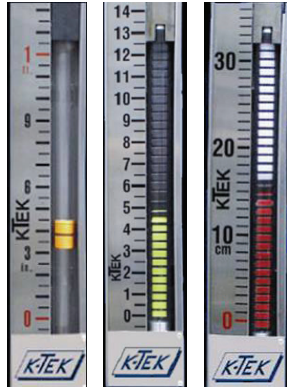
- Extra parts in the float chamber which can obstruct float travel
- Increased “footprint” of the entire system
- Increased cost of the system
- Increased weight of the system
- Remote mounting of GWR electronics when top connections to the system are required
- Limited access to the float’s magnetic field



# MagWave



MagWave with  
Valves Installed



MS30/EX SPDT 1 AMP Switch



MS41 DPDT 10 AMP Switch

# Guided Wave Radar

## Multiple Wetted Part Materials

- Standard 316SS
- Hastelloy C-276
- Hastelloy B3
- Monel
- Titanium

## Couplers Suited to the Process

- Standard
  - 1500 psi @ 100 F (103bar @ 38 C)
  - 600 psi @ 400 F (41 bar @ 204 C)
- High Pressure
  - 3000 psi @ 100 F (207bar @ 38 C)
  - 1200 psi @ 400 F (83bar @ 204 C)
- High Pressure/Temperature
  - 5000 psi @ 100 F (344bar @ 38 C)
  - 1500 psi @ 800 F (103bar @ 427 C)
- Saturated Steam
  - 2000 psi @ 635 F (138bar @ 335 C)

## Modular Electronics

- LCD Display
- HART Communications
- Honeywell DE
- Level and Interface Measurement

## Dual Compartment Housings

- Powder Coated Aluminum Standard
- Stainless Steel
- Solid Covers or Viewing Windows
- Built in RFI Protection

## Single Probe Waveguides

- 3/16 inch Cables
- 1/4 inch and 1/2 inch Rigid Rods

## Hazardous Area Approvals

- FM Factory Mutual
 

XP / I / 1 / ABCD / T6	Ta = 77C
DIP / II, III / 1 / EFG / T6	Ta = 77C
IS / I / 1 / CD / T4	Ta = 77C - ELE1014
NI / I / 2 / ABCD / T4	Ta = 77C

 Type 4X
- CSA Canadian Standards Association
 

XP CL I Div 1 GP ABCD
CL II GP G & Coal Dust (Exia) Associated Equip., Provides I.S. Output to Sensor
IS CL I Div 1 GP CD T4
CL I Div 2 GP ABCD
CL II Div 2 GP G & Coal Dust when installed per ELE1014
- ATEX Flameproof
 

II 1/2 GD EExd IIC T6 (80°C) Tamb +66°C;
02 ATEX 131713
- ATEX Intrinsically Safe
 

II 1 GD EEx ia IIB T6 (80°C) Tamb +66°C;
02 ATEX 131712



# Alternate Transmitters



### AT100

- Magnetostrictive Transmitter
- LCD Display
- HART Communications
- Honeywell DE
- Foundation Fieldbus
- FM, CSA, ATEX approvals
- Level and Interface Measurement



### A38

- Capacitance Transmitter
- Magnet Calibration
- FM and CSA approvals
- Level or Interface Measurement
- Low Cost Transmitter
- Rod and Cable Probes

For Detailed Specifications and Ordering Information Consult the MagWave Configuration Guide COI/MW05-EN.

# Contact us

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## Note











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	Actuators and Positioners		Analytical Instruments
	Device Management, Fieldbus and Wireless		Flow Measurement
	Force Measurement		Level Measurement
	Natural Gas Measurement		Pressure Measurement
	Recorders and Controllers		Temperature Measurement

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